**Function Point Metric for**

**Book Shop Automation System**

**STEP 1: COMPUTE UFP**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EI** | **EO** | **EQ** | **ILF** | **EIF** |
|  |  |  |  |  |
| Category | Demand\_list | Availability\_status | Demand\_db |  |
| Book\_title | Order\_status | Request\_field | Books\_db |  |
| Author\_name | Avail\_book\_list | Sales\_statistics | Inventory\_db |  |
| E-mail | Inventory\_level | Freq\_user\_list | Sales\_record |  |
| Book\_details | Rack\_No. |  |  |  |
| Price | Sales\_receipt |  |  |  |
| ISBN\_no | Bill |  |  |  |
| No\_of\_copies |  |  |  |  |
| Publisher\_address |  |  |  |  |
|  |  |  |  |  |
| **EI=9** | **EO=7** | **EQ=3** | **ILF=4** | **EIF=0** |

|  |  |  |
| --- | --- | --- |
| UFP = (9\*4) + (7\*5) + (3\*4) + (4\*10) + (0\*7) | | |
| = 123 |  |  |

**STEP 2: REFINE UFP**

|  |  |  |  |
| --- | --- | --- | --- |
| **EI** |  | **EO** |  |
|  |  |  |  |
| Category | 3 | Demand\_list | 7 |
| Book\_title | 3 | Order\_status | 4 |
| Author\_name | 3 | Avail\_book\_list | 7 |
| E-mail | 3 | Inventory\_level | 7 |
| Book\_details | 6 | Rack\_No. | 4 |
| Price | 3 | Sales\_receipt | 4 |
| ISBN\_no | 3 | Bill | 4 |
| No\_of\_copies | 3 |  |  |
| Publisher\_address | 6 |  |  |
|  |  |  |  |
|  | **33** |  | **37** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **EQ** |  | **ILF** |  | **EIF** |  |
|  |  |  |  |  |  |
| Avilability\_status | 6 | Demand\_db | 15 |  |  |
| Request\_field | 3 | Books\_db | 15 |  |  |
| Sales\_statistics | 6 | Inventory\_db | 15 |  |  |
| Freq\_user\_list | 6 | Sales\_record | 15 |  |  |
|  |  |  |  |  |  |
|  | **21** |  | **60** |  | **0** |

|  |  |  |
| --- | --- | --- |
| UFP = 33 + 37 + 21 + 60 + 0 | | |
| = 151 |  |  |

**STEP 3: COMPUTE FP**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1. Reliable backup and recovery | | |  |  | 4 |
| 2. Complexity of Data Communication | | |  |  | 4 |
| 3. Distributed Processing | |  |  |  | 3 |
| 4. Performance Criticality | |  |  |  | 3 |
| 5. Operational Environment | | |  |  | 2 |
| 6. Online Data Entry | |  |  |  | 4 |
| 7. Multi Screen or Multi Operational Online Data Entry | | | |  | 2 |
| 8. Online Updation of ILF | |  |  |  | 5 |
| 9. Complexity of Inputs, outputs, files and inquiries | | | |  | 4 |
| 10. Complexity of Internal Processing | | |  |  | 5 |
| 11. Code Reusability | |  |  |  | 3 |
| 12. Complexity of Installation | | |  |  | 0 |
| 13. Multiple Sites Installation | | |  |  | 0 |
| 14. Change Management and Ease of use | | |  |  | 3 |
|  | | |  |  |  |
| Total |  |  |  |  | 42 |

|  |  |
| --- | --- |
| **Compute TCF** | |
| TCF = 0.65+ 0.01\* DI | |
| = 0.65 + 0.42  =1.07 |  |
| |  |  | | --- | --- | | **Compute FP** | | | FP = UFP \*TCF | | | =151\*1.07  =161.57 |  | |  |
|  |  |
|  | |
|  | |
|  |  |